TIMOFEYEVA, L.A.; ZHOVTYY, I.F.; NEKIPELOV, N.V.; GOLOVACHEVA, V.Ya.;
GORDIYENKO, G.P.; DUBOVIK, N.M.; KOROBEYNIKOVA, A.I.; MIRONOVA,
L.P.; MERINOV, S.P., MATAFONOVA, Z.G.; SHVEDKO, L.P.;
VASINOVICH, M.I.

Search for plague and other epizootic diseases in a Transbaikalian plague focus. Report No.2. Izv.Irk.gos.nauch.-issl.protivochum. inst. 20:3-13 '59. (MIRA 13:7)
(TRANSBAIKALIA--RODENITA--DISEASES AND PESTS)

TIMOFEYEVA, L.A.; ZHOVTYY, I.F.; NEKIPELOV, N.V.; BUSOYEDOVA, N.M.;
GOLOVACHEVA, V.Ya.; DUBOVIK, I.M.; DUBOVIK, V.I.; ZHIVOLYAPINA,
R.R.; LEONT'YEV, A.N.; PETUKHOVA, O.I.; TIMOFEYEVA, A.A.; SHVEDKO, L.P.

Search for plague and other epizootic diseases in Transbaikalian plague focus. Report No.2. Izv.Irk.gos.nauch.-issl.protivochum. inst. 15:3-17 '57. (MIRA 13:7)
(TRANSBAIKALIA--RODENTIA--DISEASES AND PESTS)

SHVEDKO, V.K.

Method for obtaining geological data for mining in the Dzhezkazgan copper deposit. Izv. AN Kazakh. SSR. Ser. geol. no.2:3-13 '60. (MIRA 13:8)

(Dzhezkazgan region--Copper)

SHVEDKO, V. K., CAND GEOL ~~AND~~ MIN~~ERAL~~ SCI, "GEOLOGICAL CONDITIONS OF THE DZHEZGAZGAN DEPOSIT AND ~~THE~~ METHODS ~~OF~~ for ~~THE~~ MINING ~~AND~~ GEOLOGICAL Cupmnt OPERATIONS." ALMA-ATA, 1961. (ACAD SCI KAZSSR. INST OF GEOL SCI~~ENCES~~). (KL-DV, 11-61, 213).

SHVEDKO, V.K.

New case of the manifestation of hydrothermal processes in the Dzhezkazgan deposit. Vest. AN Kazakh. SSR 17 no.10:97-103 O '61. (MIRA 14:10)
(Dzhezkazgan--Quartz) (Metasomatism)

SATPAYEVA, T.A.; NURALIN, N.N.; SHVEDKO, V.K.; FURSOVA, M.Z.;
DZHAMINOV, K.D.

Characteristics of the distribution of ore material in
some rocks of the Dzhezkazgan series. Vest. AN Kazakh.
SSR 17 no.9:70-83 S '61. (MIRA 16:8)

NURALIN, N.N.; SAFARGALIYEV, G.S.; SEYFULLIN, S.Sh.; SHVEDKO, V.K.;
STIFANOV, V.I.

More on the genesis of the Dzhezkazgan deposit. Geol. rud. mestorozh.
6 no.1:105-112 Ja-F '64. (MIRA 17:11)

NIKITIN, V.K.; SHVEDKOV, L.K.; SKORODUMOV, B.A.

Thread profile undercutting in vortex milling. Stan.i instr. 25 no.4: 22-25 Ap '54. (MLRA 7:6)

(Milling machinery) (Screw threads)

NIKITIN, Vasilii Konstantinovich; SKORODUMOV, Boris Aleksandrovich, SHVEDKOV, Leonid Konstantinovich; SHNEYDERMAN, I.Ya., inzhener, retsenzent; SOROKA, M.S., redaktor; RUDENSKIY, Ya.V., tekhnicheskiy redaktor

[Vortical cutting of threads in nuts] Vikhrevoe narezanie rez'by v gaikakh. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 41 p. (MIRA 9:7)

(Bolts and nuts) (Screw cutting)

ARTAMONOV, A.Ya.; SHVEDKOV, Ye.L.

Effect of treatment on the strength of extremely hard materials. Poroch. met. 3 no.1:79-82 Ja-F '63. (MIRA 16:3)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.
(Ceramic metals--Testing) (Electric metal cutting)

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KORNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon. nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon. nauk; AVRAMCHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon. nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; YEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon. nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KORNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon.nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon.nauk; AVRAMCHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon.nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; YEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon.nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

SHVEDKOVA, V.

Distortion of the nature of monopolies in works of bourgeois economists in the United States. Vop.ekon.no.1:87-97 Ja '57.
(MLRA 10:3)

(United States--Monopolies)

MANUKYAN, A.A.; GLUSHKOV, V.P.; SHVEDKOVA, V.M.; SVIRIDOVA, Z.P.; CHEBOTAREVA, Ye.A.; SHUMILIN, V.I.; PUDINA, K.V.; BRAGINA, N.M.; LUTSKAYA, Ye.Ye.; KODACHENKO, A.S.; KOSOVA, V.A.; MOKLYARSKIY, B.I.; GRECHIKHIN, A.A.; KULIKOV, N.I.; RYDVANOV, N.F.; BEL'CHUK, A.I.; VINTSER, Yu.I.; ROZENTAL', Ye.I.; BELOUS, T.Ya.; SIDOROV, V.F.; ZHDANOVA, L.P.; ALEKSANDROVSKAYA, L.I.; KOVAL', V.V.; KHAVINSON, Ya.S., glavnyy red.; SOKOLOV, I.A., zam.glavnogo red.; ALEKSEYEV, A.M., red.; ARZUMANYAN, A.A., red.; BELYAKOV, A.S., red.; BECHIN, A.I., red.; VARGA, Ye.S., red.; LEMIN, I.M., red.; LYUBIMOVA, V.V., red.; SKOROV, G.Ye., red. V redaktirovanii uchastvovali: SHAPIRO, A.I., red.; TATISHCHEV, S.I.. KOVRIGINA, Ye., tekhn.red.

[Economic conditions of capitalistic countries; review of business conditions for 1958 and the beginning of 1959] Ekonomicheskoe polozhenie kapitalisticheskikh stran; kon"iunkturnyi obzor za 1958 g. i nachalo 1959 g. Moskva, Izd-vo "Pravda," 1959. 127 p. (Prilozhenie k zhurnalu "Mirovaia ekonomika i mezhdunarodnye otnosheniia," no.8, avgust 1959 g.) (MIRA 12:9)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy. 2. Kollektiv sotrudnikov kon"yunkturnogo sektora Instituta mirovoy ekonomiki i mezhdunarodnykh otnosheniy AN SSSR (for Glushkov, Shvedkova, Sviridova, Chebotareva, Shumilin, Pudina, Bragina, Lutskaya, Kodachenko, Kosova, Moklyarskiy, Grechikhin, Kulikov, Rydvanov, Bel'chuk, Vintser, Rozental', Belous, Sidorov, Zhdanova, Aleksandrovskaya, Koval').(Economic conditions)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

11F

CCC

Senescence of the elastica and the lipoidase process in the tissue of the mammary gland. T. S. Shvedkova-Roshe. *J. méd. Ukraine* 10, 577-80(Russian and English summaries)(1940).—The basophilic degeneration (senescence) of the elastica and the lipoidase process of the elastic substances in the tissue of the mammary gland were studied in 67 women, 17-72 years of age. Disturbance of the lipoid metabolism was noted in the tissue of the mammary gland; this took the form of a deposition of lipoid substance along the elastica in the walls of the lactiferous ducts as well as in the interstices around the blood vessels. This process, which is barely perceptible beginning at the age of 20 (in the form of a slight sudanophilia), develops with time and reaches a max. after the age of 60; it is noted in all cases after the age of 40. The fatty deposits are of a diffuse nature (they do not pass into a droplet stage) and are, chemically, a lipoid substance. The investigations established a parallelism between the processes of lipoidase and basophilic degeneration of the elastica, both as to the localization and as to the time and intensity of development.

Ruth Berggren

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

AUTHOR INDEX

COUNTRY : USSR
CATEGORY : General Problems of Pathology. Tumors. Nervous System
ABS. JOUR. : RZBiol., No. 12 1958, No. 56377

AUTHOR : Shvedkova-Roshe, T.S.
INST. : Kiev Scientific Research Radiology and Oncology *
TITLE : Morphologic Changes of the Nerves upon the Development of Sarcomas Caused by the Administration of Carcinogenic Hydrocarbons

ORIG. PUB. : Uch. Zap. Kievsk. N.-I. Rentgeno-Radiol. i Onkol. In-ta, 1955, Vol.5, 61-73

ABSTRACT : In mice injected into the muscles of the leg or subcutaneously with a solution of dibenzanthracene and methylcholanthrene in sunflower oil, studies were made of the morphologic changes of the nerve elements at different stages in the development of cancer. In some of the experimental animals, sarcomas of myogenic origin developed, while in others undifferentiated spindle-cell sarcomas appeared. For the demonstration of the nerve fibers, Cajal and Gross-Bielschowsky impregnation methods were used. In the first 2-3 months after the administration of the cancerogen, fluorescent microscopy

CARD: 1/3

*Institute

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. [illegible] 1958, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : were found; the latter were rarely encountered in the central parts of the tumor and were mostly concentrated in the peripheral portions of it. The newly-formed nerve elements were unstable, and easily underwent dystrophic changes. The nerve elements of the tumor arose from the nerves of surrounding tissues, as well as, apparently, from the nerve elements of foci of malignant degeneration. -- A.A.Grighite

[illegible]

GUZ', B.I. [Huz', B.I.]; GOL'DSHTEYN, B.I.; IVANYUK-BELUGA, Ye.I. [Ivaniuk-Beluha, IE.I.]; SHVEDKOVA-ROSHE, T.S.

Compound therapy in cervical cancer. Ped., akush. i gin. 19 no.1: 36-42 '57. (MIRA 13:1)

1. Kiyevskiy rentgeno-radiologicheskiy i onkologicheskiy institut (direktor - prof. I.T. Shevchenko) i Institut pitaniya Ministerstva okhrany zdorov'ya USSR (direktor - A.G. Stovbun).
(UTERUS--CANCER) (IRON SODIUM TARTRATE)

KRAMARENKO, Yu.Yu., prof.; SHVEDKOVA-ROSHE, T.S., dotsent (Kiyev)

"Problem of anticancerous antibiotics" by N.G.Klinueva, G.I.Roskin. Reviewed by IU.IU.Kramarenko, T.S.Shvedkova-Roshe. Nov.khir. arkh. no.4:112-117 Jl-Ag '59. (MIRA 12:11)
(ANTIBIOTICS) (CANCER) (KLIUEVA, N.G.) (ROSKIN, G.I.)

SHVEDOV, A.

Including advanced work methods in training. Prof.-tekh.obr. 11 no.6:23-24 S '54. (MLRA 7:10)

1. Starshiy master remeslennogo uchilishcha No. 39 (Leningrad)
(Metal cutting--Study and teaching)

SHVEDOV, A.

Introducing progressive working methods. Prof.-tekh. obr. 12 no.7:10-12 Jl '55. (MLRA 8:9)

1. Starshiy master remeslennogo uchilishcha no.39, Leningrad (Metal cutting)

SHVEDOV, A.

Students construct, manufacture and use appliances. Prof.-tekh. obr. 18 no.7:22-23 Jl '61. (MIRA 14:7)

1. Starshiy master tekhnicheskogo uchilishcha No.15, Leningrad. (Mechanical engineering--Study and teaching)

SHVEDOV, A. F.; POPOV, V. G., dotsent; SMETNEV, A. S.; BELKIN, V. S.

Problems in the organization of specialized medical care for patients with myocardial infarct complicated by collapse under conditions of first aid in Moscow. Terap. arkh. 33 no.5:108-112 My '61. (MIRA 14:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. V. N. Vinogradov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I. M. Sechenova i stantsii skoroy pomoshchi Moskvy (nach. A. F. Shvedov)

(HEART—INFARCTION) (SHOCK)
(MOSCOW—FIRST AID IN ILLNESS AND INJURY)

VASILENKO, Aleksey Nikolayevich, kand. tekhn. nauk; DRYZHAKOV, Yevgeniy Vasil'yevich, dots.; ISAYEV, Sergey Ivanovich, kand. tekhn. nauk; KORNEYCHUK, Nikolay Karpovich, kand. tekhn. nauk, dots.; KOFANOV, Vyacheslav Ivanovich; assistent; KRUTOV, Vitaliy Ivanovich, doktor tekhn. nauk, prof.; MIRONOV, Boris Mikhaylovich, kand. tekhn. nauk; NIGMATULIN, Iskander Nigmatulevich, doktor tekhn. nauk, prof.; NOSOV, Mikhail Vasil'yevich, prof.; SAMOYLOV, Mikhail Sergeyevich, assistent; SPORYSH, Igor'Pavlovich, kand. tekhn. nauk, prof.; KHVOSTOV, Viktor Ivanovich, kand. tekhn. nauk; SHISHOV, Yevgeniy Viktorovich, kand. tekhn. nauk; YUDAYEV, Boris Nikolayevich, kand. tekhn. nauk, dots.; KUTYRIN, I.N., dots., kand. tekhn. nauk, retsenzent; SHVEDOV, A.M., dots., retsenzent; TUPITSYNA, L.A., red.; FUFAYEVA, G.I., red.

[Problems in technical thermodynamics and heat transfer] Sbornik zadach po tekhnicheskoi termodinamike i teploperedache. [By] A.N.Vasilenko i dr. Moskva, Vysshaia shkola, 1964. 369 p. (MIRA 17:4)

1. Prepodavatel'skiy kollektiv kafedry termodinamiki i teploperedachi Moskovskogo vysshego tekhnicheskogo uchilishcha (for all except Kutyrin, Shvedov, Tupitsyna, Fufayeva). 2. Moskovskiy aviatsionnyy institut (for Kutyrin, Shvedov).

TUPIKOVA, N.V.; SHVEDOV, A.P.

Taxonomic position, distribution, and ecology of the Altai high-mountain vole. Biul. MOIP. Otd. biol. 66 no.6:5-14 N-D '61.
(MIRA 14:12)

(ALTAI MOUNTAINS--FIELD MICE)

KARTUSHIN, V.M.; SHVEDOV, A.P.

Problems of geobotanical mapping discussed at the conference in Novosibirsk. Sib.geog.sbor. no.1:225-230 '62. (MIRA 16:2)

(Phytogeography--Maps)

SHVEDOV, A.P.

Distribution of birds in the middle Andra Valley (Bratsk and Zayarsk Districts of Irkutsk Province). Ornitologiia no.4:169-175 '62. (MIRA 16:4)

(Angra Valley—Birds)

SHVEDOV, A.P.

First Conference of Young Geographers of Siberia. Izv. Sib. otd. AN SSSR no.6:115-116 '62 (MIRA 17:7)

8

SHVEDOV, Aleksandr Stepanovich; TIKHONOVA, N.V., red.; NESMYSLOVA, L.M., tekhn. red.

[Tests on the industrial training of lathe and milling machine operators] Proverochnye raboty po proizvodstvennomu obucheniiu tokarei i frezerovshchikov. Moskva, Proftekhizdat, 1963. 65 p. (MIRA 17:3)

1. Starshiy metodist Leningradskogo gorodskogo uchebno-metodicheskogo kabineta (for Shvedov).

SHVEDOV, B.I.

E-2

USSR/Organic Chemistry. Synthetic Organic Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19175

Author : Grinyev A. N., Shvedov B. I., Tyerent'yev A.P.
Inst :
Title : Studies in the Field of Quinones. Reaction of Acetylacetoneimine with n-benzoquinone. XI. Synthesis of some substituted Indoles.

Orig Pub: Zh. obshch. khimiyi, 1956, 26, No 5, 1449-1451; 1452-1453 X.

Abstract: At the interaction of n-benzoquinone (I) with the imine of acetylacetone (II) 2-methyl-3-acetyl-5-hydroxybenzofurane (III) and 2-methyl-3-acetyl-5-hydroxyindole (IV) are formed. Structure of IV is determined by the identity of 2-methyl-3-acetyl-5-methoxyindole (V) obtained from it with the V obtained by the counter synthesis. To a solution of 3 g. I in 8 cc of dry acetone is added a solu-

Card : 1/4

E-2

USSR/Organic Chemistry. Synthetic Organic Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19175

tion of 2.8g. II in 8cc acetone, heated for 1 hour at 100°
and IV yield 38.1%, m.p. 292-293° (from pyridine), and III,
yield 28.9% m.p. 234-235° (from dioxane) are isolated.
To a sol. 1.1 g. IV in 15cc 2N solution NaOH are added
1.5 cc dimethylsulfate (VI), heated at 100° for 30 min.
(in a current of N_2) and V is obtained, yield quantitat-
ive, m.p. 127-128° (from dioxane). To a solution of 5.5
g. 2-methyl-3-carbethoxy-5-hydroxyindole (VII) in 36 cc
2N solution NaOh is added by shaking 6.6g. VI (in a cur-
rent N_2) then 15 cc 2N solution NaOH, heated for 30 min.
at 100°, and 2-methyl-3-carbethoxy-5-methoxyindole (VIII),
yield amount, m.p. 160.5-161° from alcohol) is obtained.
A suspension of 10 g. VIII in 350 cc 2N solution NaOH and
150 cc dioxane are boiled 2 hours dioxane is distilled
off, and 2-methyl-5-methoxyindole (IX) is obtained, m.p.
89-90°. By acidifying the mother solution with CH_3COOH,

Card : 2/4

USSR/Organic Chemistry. Synthetic Organic Chemistry. E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19175

acid (XII) is studied. It was determined, that at the interaction of N-phenylacetylacetoneimine (XIII) with I, 1-phenyl-2-methyl-3-carbethoxy-5-hydroxyindole (XIV) is formed. To a solution of 10 g. XI in 20 cc $CHCl_3$ at 20° is added a sol. of 9.2 g. XII in 20 cc $CHCl_3$, heated 1 hour at 100°, and 1-ethyl-2-methyl-3-carbethoxy-5-hydroxy-6,7-dichloroindole (XV) is obtained, yield 54.5%, m.p. 209.5-210° (from dioxane). 4.5 g. XV is mixed with 2N solution NaOH (in a current of N_2), dioxane is added until the precipitate is dissolved, 2.72 cc of VI is added, after 10 min. it is heated 30 min. at 100°, and 1-ethyl-2-methyl-3-carbethoxy-5-methoxy-6,7-dichloroindole is obtained, yield 4.7 g. m.p. 127-128° (from dioxane). To a solution of 10.8 g. I and 30 cc dry acetone is added 26.3 g. XIII, heated 1 hour at 100°, evaporated, ether is added, and XIV is obtained, yield 38.2%, m.p. 232-233° (from alcohol).

Card : 4/4

[illegible] SALDADZE, K.M.; PASHKOV, A.B.; BRUNS, B.P.

Use of type KU-2 cationites for the decalcification of streptomycin solutions. Med.prom. 14 no.4:13-17 Ap '60.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(ION EXCHANGE) (STREPTOMYCIN)

SOV/142-2-5-1/19

9(3)

AUTHOR: Shevchik, V.N., Shvedov, G.N.

TITLE: Space Charge Waves in Electron Stream - A Review

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 5, pp 511 - 553 (USSR)

ABSTRACT: This is a systematic review of papers dealing with space charge waves in electron guns. Thusfar, these papers have been systematized to an inadequate extent. The systematic discussion of electron-wave processes in different electron streams is limited to such systems in which electron-wave processes are of utmost importance. Systems similar to traveling wave tubes were not taken into consideration, since here electron-wave processes are only corrections of the basic electromagnetic phenomena proceeding in external oscillatory circuits. The mathematical analysis was based on books by V.M. Lopukhin [Ref 3] and S.D. Gvozdover [Ref 4]. Discussing Brillouin streams, the authors

Card 1/3

SCV/142-2-5-1/19

Space Charge Waves in Electron Stream - A Review

mention papers by numerous foreign scientists and the
Soviet scientists M.M. Bredov [Ref 34], M.D. Gabovich
[Ref 36], V.I. Volosok, V.B. Chirikov [Ref 37] and Yu.
A. Katsman, [Ref 39]. The papers of V.M. Lopukhin [Ref
53], A.A. Vlasov [Ref 54,55], S.K. Lesota [Ref 62], M.
I. Rodak [Ref 63], Yu.K. Bergner [Ref 64], Z.S. Chernov
[Ref 64], are mentioned in connection with electron
streams with discrete velocity distributions. L.D.
Landau's [Ref 70] and A.A. Nikolayev's papers deal
with electron flows with continuous distribution of
velocities. Electron streams with a periodic structure
were discussed in papers by P.C. Bliokh, Ya.B. Fayn-
berg [Ref 86], V.A. Solntsev, A.S. Tager [Ref 91], P.
V. Bliokh [Ref 92], G.A. Bernashevskiy [Ref 93], V.I.
Mnoyan, D.K. Akulina [Ref 94], S.I. Tetel'baum [Ref
102-105] and P.A. Borodovskiy [Ref 109]. A.S. Tager's
paper [Ref 115] is mentioned in connection with space
charge noise waves. The publication of this paper

Card 2/3

SOV/142-2-5-1/19

Space Charge Waves in Electron Stream - A Review

was recommended by the Kafedra elektroniki (Electronics Department) of the Saratovskiy gosudarstvennyy universitet imeni N.G. Chernyshevskogo (Saratov State University imeni N.G. Chernyshevskiy). There are 18 graphs, 4 sets of graphs, 2 diagrams and 143 references, of which 83 are English, 32 Soviet, 22 German and 6 French.

SUBMITTED: December 22, 1958

Card 3/3

82454

9.4220

S/141/60/003/03/009/014
E192/E382

AUTHORS: Shevchik, V.N. and Shvedov, G.N.

TITLE: An Electron-wave Oscillator with a Retarding Field

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1960, Vol. 3, No. 3, pp 432 - 441

TEXT: Several years ago it was observed at the Electronics Laboratory of the Saratov University that a reflex klystron could generate oscillations of the decimetre range in the absence of the resonator. The investigation of these oscillations is of considerable theoretical interest since it may help to explain the nature of the electron oscillations in systems with a retarding field and in other ultrahigh-frequency oscillators having a large electronic tuning bandwidth. First, in order to explain the oscillations observed it was checked whether they were not due to some unknown parasitic oscillatory circuits. For this purpose, an external resonant circuit, having a low quality factor, was connected to the klystron (Fig. 7) and the dependence of power and oscillation frequency on the voltage at the grids was studied (Fig. 1). It was found that the oscillations with such external resonant circuits were impossible. It appears that the most logical

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An Electron-wave Oscillator with a Retarding Field

and consistent explanation of the oscillations observed is obtained if it is assumed that they are due to the oscillatory properties of the electron beam itself. These properties are due to the Coulomb repulsion forces between electrons. By considering the Coulomb interaction, the propagation of a perturbance in an electron beam can take the form of density, velocity and electric-field waves. In general, the generation of the oscillations in a tube with a retarding field can be represented by the following model. A closed electron beam can be regarded as a "Sui generis" electron resonator since there can exist only specified frequencies which satisfy the condition of the space-charge wave. In order that the oscillations be maintained without attenuation, it is necessary to secure an electron-wave interaction with an energy transfer into the high-frequency field of the space charge. In this way, the electron resonator becomes an electron-wave oscillator. By applying the above general system to the oscillations observed in klystrons, it is necessary to bear in mind that an exact analysis of a system with a retarding field is as yet impossible. It is therefore advisable

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to split the problem into two parts. First, an idealised system of interaction of the electron beams is considered in order to explain the possibility of the energy exchange between an electron beam and the high-frequency field of the space charge. The process is illustrated in Fig. 2. The graph represents the dependence of the interaction power of the electron beams on the transit angle φ_o of the electron beam in the interaction space; $\varphi_o = \omega z/v_o$, where ω is the generated frequency, z is the length of the interaction space and v_o is the velocity of the electrons. The negative power in the graph represents the interaction power corresponding to the transfer of the energy into the high-frequency field. From Fig. 2, it is seen that this is possible over a wide range of the transit angle φ_o. The second part of the problem consists of defining the frequency characteristics of the oscillator. The process will be maintained in a closed electron beam at a frequency such that an integral number of wavelengths appears over the closed path. However, since the phase velocity of the space-

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charge waves differs very slightly from the electron velocity, this condition means that an integer number n of the oscillations is generated during the transit time of an electron between cathode-reflector-cathode. Consequently, the generated frequency is given by:

$$f = n \frac{1.48 \cdot 10^5 \sqrt{V_g}}{d_1 + d_2/2 + d_3/(1 - V_r/V_g)} \qquad (1)$$

where V_g is the voltage at the grids,
V_r is the voltage at the reflector,
d_1 is the length of the acceleration space,
d_2 is the length of the drift space and
d_3 is the length of the retardation space.

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An Electron-wave Oscillator with a Retarding Field

A number of experiments were carried out to determine the influence of d_1, d_2 and d_3 on the magnitude of the generated frequency. The effect of d_2 is illustrated in Fig. 3a, while f as a function of d_3 is shown in Fig. 3б. The points in Fig. 3a represent the experimental values, while the sloping line was calculated on the basis of Eq. (1). It is seen that no satisfactory agreement between the calculated and the experimental results is obtained in Fig. 3б. The dependence of frequency on V_g for two values of the reflector voltage is illustrated in Figs. 4. Fig. 5 shows the dependence of f on V_r. Fig. 6 shows the dependence of f on the power P of the generator on the distance ℓ between the plungers of the three tuning lines from the axis of the klystron. The above experimental data indicate that the representation of an oscillator with a retarding field by means of a closed electron beam is quite feasible. The above concept should be regarded as an attempt to explain the electron oscillations in a system with a retarding field which is in general agreement with the available experimental data

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An Electron-wave Oscillator with a Retarding Field

and modern theories. It is not, however, a complete theory. There are 7 figures and 22 references: 12 Soviet, 8 English, 1 French and 1 German.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet
(Saratov State University)

SUBMITTED: December 24, 1959

Card 6/6

S/194/62/000/004/085/105
D271/D308

9.4230

AUTHORS: Shevchik, V. N. and Shvedov, G. N.

TITLE: Study of some characteristics of an electron-wave oscillator

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4zh118 (Uch. zap. Saratovsk. un-t, 1960, 69, 77-89)

TEXT: Results are reported of an experimental study of retarding-field electron-wave oscillator (RZhFiz., 1961, 3zh317). The dependence of the oscillation frequency on the current density, with fixed electrode voltages, was investigated. No substantial frequency variations were found. The influence of the grid penetration factor on the oscillator characteristics and the relation between the frequency and retarding field length were studied. Frequency characteristics are given of two-cathode tubes with retarding field. Results are shown of the calculation of interaction of opposite electron beams by the method of postulated field. ⌈Abstracter's note: Complete translation.⌋

1/B

Card 1/1

SHEVCHIK, V.N.; SHVEDOV, G.N.; SOBOLEVA, A.V.; Prinimala uchastiye
TRUBETSKOV, D.I., aspirant; VINNIKOVA, I.A., red.; ZENIN,
V.V., tekhn. red.

[Oscillatory and wave effects in electron currents at superhigh frequencies]Volnovye i kolebatel'nye iavleniia v elektronnykh potokakh na sverkhvysokikh chastotakh. Saratov, Izd-vo Saratovskogo univ., 1962. 334 p. (MIRA 15:10)
(Microwaves) (Electromagnetic waves) (Microwave tubes)

ANDRUSHKEVICH, V.S.; BUDNIKOVA, N.P.; GRIGOR'YEV, M.A.; ZHARKOV, Yu.D.; SINITSYN, N.I.; STAL'MAKHOV, V.S.; TRUBETSKOV, D.I.; SHVEDOV, G.N.; SHEVCHIK, V.N.; NOSKOVA, R.F., red.

[Electronic superhigh-frequency devices] Elektronnye pribory sverkhvysokikh chastot. Saratov, Izd-vo Saratovskogo univ., 1964. 187 p. (MIRA 18:4)

SHVEDOV, G. V.

USSR/Geology
Volcanos

Dec 47

"The Roots of Mud Volcanos of the Transcaspian Regions," G. Ya. Krymgol'ts, G. V. Shvedov, 2 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVIII, No 7. Submitted 16 Jul 1947.

PA 60T33

SHVEDOV, G.V.; DIMAKOV, A.I.

Tectonics and prospects for finding gas and oil in the
northern Mangyshlak Peninsula. Trudy VNIGRI no.218:142-168
'63. (MIRA 17:3)

SHVEDOV, G.V.; DIMAKOV, A.I.; KRUCHININ, K.V.

Current state of the geological and geophysical study of the Mangyshlak Peninsula in connection with its gas and oil potentials. Trudy VNIGRI no.218:431-446 '63.
(MIRA 17:3)

AUTHOR: Shvedov, I. A. (Moscow) SOV/20-122-4-7/57

TITLE: Proof of the Theorem on the Homeomorphism of Polyhedra and Point Sets (Dokazatel'stvo teoremy o gomeomorfizme poliedrov i tochechnykh mnozhestv)

PERIODICAL: Doklady Akademii nauk, SSSR, 1958, Vol 122, Nr 4, pp 566-569 (USSR)

ABSTRACT: Aleksandrov [Ref 1,2] proved the theorem: In order that the sets $A \subseteq R^n$ and $A' \subseteq R^{n'}$ be homeomorphic, it is necessary and sufficient that their geometric spectra S in R^n and S' in $R^{n'}$ possess confinal parts s and s' which can be confinally completed to the same abstract spectrum $\sum$.

The author proves the same theorem, but he uses the notion "confinal" in an essentially simpler and more natural sense than Aleksandrov did, namely: The spectrum σ is the confinal part of the spectrum $\sum$, if the directed set of the complexes forming σ is the confinal part (in ordinary sense) of the directed set of the complexes forming $\sum$, and if the projections W_{α}^{β} in σ are the same as in $\sum$. (Notations of

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Proof of the Theorem on the Homeomorphism of Polyhedra and Point Sets SOV/20-122-4-7/57

Aleksandrov [Ref 1,2]).
There are 2 Soviet references.

ASSOCIATION: Kafedra vysshey geometrii i topologii Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova (Chair of Higher Geometry and Topology of the Moscow State University imeni M.V. Lomonosov)

PRESENTED: May 6, 1958, by P.S.Aleksandrov, Academician

SUBMITTED: April 20, 1958

Card 2/2

16(1)

AUTHOR: Shvedov, I.A. SOV/20-128-2-8/59

TITLE: Projection Spectra and the Completeness of Topological Spaces

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 2, pp 250-252 (USSR)

ABSTRACT: The author uses the notion of the projection spectrum introduced by P.S.Aleksandrov [Ref 1] in order to investigate, by approximation of the spaces with the aid of simplicial complexes, the connection which exists between systems of open coverings of a topological space and the extensions of this space. It is assumed that all considered spaces are T_1-spaces. Most of the results are generalizations of the corresponding theorems of Yu.M.Smirnov [Ref 3,4] on uniform spaces. The author gives seven definitions and eight theorems.
There are 4 references, 3 of which are Soviet, and 1 American.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

PRESENTED: May 18, 1959, by P.S.Aleksandrov, Academician

SUBMITTED: May 14, 1959

Card 1/1

KUZ'MINOV, V.; SHVEDOV, I. A

Cohomology and dimensionality of uniform spaces. Dokl. AN SSSR 135 no.6:1322-1325 D '60. (MIRA 13:12)

1. Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova. Predstavleno akademikom P.S. Aleksandrovym.

(Spaces, Generalized)

SHVEDOV, I.A.

Approximation of bicompacts by projection spectra. Trudy Mat. inst. AN Gruz. SSR 27:11-14 '60. (MIRA 15:3)
(Topology)

SHVEDOV, I. A.

Dissertation defended for the degree of Candidate of Physicomathematical Sciences at the Mathematical Institute imeni V. A. Steklova 1962:

"Projection Spectra."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

SHVEDOV, I.A.

Projection spectra. Trudy mosk. mat. ob-va 12:99-124 '63. (MIRA 16:11)

KUZ'MINOV, V.I.; SHVEDOV, I.A.

Cohomology groups of uniform spaces. Sib. mat. zhur. 5 no.3:565-595 My-Je '64. (MIRA 17:6)

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S/020/60/132/06/32/068
004/B005

11.8000

AUTHORS: Zaytsev, V. M., Pokhil, P. F., Shvedov, K. K.

TITLE: Electromagnetic Method 21 of Measuring the Speed of Explosion Products

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 6, pp. 1339-1340

TEXT: In contrast to the calculation of the exponent of the Poisson adiabatic curve of the explosion products carried out in Refs. 1, 2, the authors applied the direct measurement of the speed of the explosion products; a copper- or aluminum foil, 0.3-0.5 mm thick, was moved through the explosion products in an electromagnetic field, and the emf recorded by means of an OK-17M (OK-17M) cathode-ray oscilloscope. Fig. 1 shows the experimental apparatus in which the magnetic field was generated by means of direct current in two halves of the coil winding distant from each other by the coil radius, according to a suggestion by B. K. Shembel'. Fig. 2 shows an oscillogram from which the speed of the explosion products was calculated by extrapolation for the beginning of the foil movement.

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S/020/60/133/01/43/070
B004/B007

AUTHORS: Zaytsev, V. M., Pokhil, P. F., Shvedov, K. K.

TITLE: Measurement of the Velocity of Sound in Detonation Products 21

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 1, pp. 155 - 157

TEXT: The authors describe a method of measuring the velocity of sound in detonation products of explosives, which consists in the detonation wave being reflected from an inert substance (paraffin). The reflected wave propagates in the detonation products with the velocity of sound, and is recorded by an oscilloscope. Fig. 1 shows the scheme of the experimental setup and an oscillogram. By means of the equation $c = S(D - \bar{u})/(Dt - S)$ the average velocity of sound was calculated for a time interval τ (S = distance between the explosive and the inert substance, D = velocity of the detonation front, u = velocity of the detonation products, c = velocity of the reflected wave). The results obtained for trotyl and TГ 50/50 (TG 50/50 = 50 % trotyl + 50 % trimethylenetrinitroamine) are shown in Fig. 2 and Table 1. By using the phase equation suggested by

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ACCESSION NR: AP4005206 S/0207/63/000/006/0131/0134

AUTHORS: Dremin, A. N. (Moscow); Koldunov, S. A. (Moscow); Shvedov, K. K. (Moscow)

TITLE: Initiating a detonation in cast trotyl by means of a shock wave

SOURCE: Zhurnal prikl. mekhan. i tekhn. fiz., no. 6, 1963, 131-134

TOPIC TAGS: detonation, explosive, shock wave, trotyl, high explosive, combustion, shock initiation, shock detonation initiation

ABSTRACT: TNT used in this study had a sp. gr. of 1.62 and was subjected to a shock wave with pressure at the wave front of 100 000 atm. The shock wave was produced by detonating a charge 80 mm in diameter and 130 mm long next the test sample, with a plate of plexiglass 20 mm thick between. The velocity of the shock wave and the velocity of material were measured over the entire range from site of shock-wave entry to the establishment of normal detonation. The relationships of velocities to distance are shown in Fig. 1 on the Enclosure. It is seen that the two velocities depend on distance in a similar fashion. The authors have shown that chemical reaction begins immediately when affected by a shock wave of this magnitude. They conclude that in the non-ideal regime (as set up in this experiment for detonation) a detonation occurs at the interface (with the plexiglass)

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ACCESSION NR: AP4005206

almost instantaneously on arrival of the shock wave, but the amplitude of the wave is insufficient to cause chemical reaction as is observed for ideal detonation. The observed reaction must then begin at defects, such as cracks, pores, etc., where "hot points," are formed. The possibility of initiating detonation is determined by the ratio between amount of generated energy and amount of energy loss associated with attenuation of the shock wave, whether in passing through the TNT or through the inert material. The velocity of the wave front and, consequently, all the parameters at the front and the amount of generated energy affect one another in such a way that an increase in amount of generated energy leads to an increase in velocity of the front and to an increase in pressure, and an increase in pressure leads to an increase in velocity. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 13May63 DATE ACQ: 09Jan64 ENCL: 01

SUB CODE: PR NO REF SOV: 004 OTHER: 009

Card 2/~~3~~ 2

DREMIN, A.N.; SHVEDOV, K.K.; VERETENNIKOV, V.A.

Study of the detonation of PzhV-20 ammonite and some other explosives. Vzryv. delo no.52/9:10-25 '63. (MIRA 17:12)

L 10497-63 EPR/EPF(c)/EWT(m)/BDS--AFFTC/ASD--Ps-4/Pr-4--RM/BW-2/WW/
JW/JWD/H
ACCESSION NR: AP3000429 S/0076/63/037/005/1182/1186

AUTHOR: Gal'perin, L. N.; Shvedov, K. K.

76
78

TITLE: Method and setup for studying transient detonation processes

SOURCE: AN SSSR. Zhurnal fizicheskoy khimii, v. 37, no. 5, 1963, 1182-1186

TOPIC TAGS: deflagration-detonation transition, solid propellant, trotyl, nitromethane, hexogen, detonation velocity

ABSTRACT: The Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences SSSR), has developed a method and an experimental setup for studying deflagration-to-detonation transitions in solid and liquid explosives. The method is based on the reduction of resistance of a sensor, consisting of a pair of insulated wires, when shortened by the advancing reaction front. In contrast to F. C. Gibson's method (F. C. Gibson, M. L. Bowser, and C. A. Mason, Roy. Sci. Instr., 30, 916, 1959), the sensor is fed with d-c pulses, which improves the signal-to-noise ratio and eliminates calibration of the measuring circuit. The sensor consists of a copper wire 1.1 mm in diameter wound with PEVKT insulating wire 0.1 mm in diameter. The leads from the sensor are connected to a coaxial cable. In the experiments two sensing elements were

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used: the actual velocity sensor and an auxiliary sensor which served for adjusting the correct current to the velocity sensor as the reaction front approached. Detonation velocities determined in cast trotyl, charges of TG 50/50, and nitromethane agreed within 2% with literature data. Deflagration-to-detonation transitions were studied in shock-wave-induced detonations of trotyl. The shock wave velocity (4.13 km/sec) was constant over a distance of 3.14 mm (for 0.76 μsec); then it increased gradually, and at a distance of 8.86 mm (after 1.69 μsec) it reached detonation velocity. Transition processes in hexogen were also studied. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 09Jun62 DATE ACQ: 19Jun63 ENCL: 00

SUB CODE: PR,FL NO REF SOV: 002 OTHER: 002

ss/
Card 2/2

S/0207/64/000/002/0154/0159

ACCESSION NR: AP4034282

AUTHORS: Dremin, A. N. (Moscow); Shvedov, K. K. (Moscow)

TITLE: Determining the Chapman Jouguet pressure during the time of reaction in the detonation waves of powerful explosives

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1964, 154-159

TOPIC TAGS: explosive, detonation, trotyl, Chapman Jouguet region, oscillograph, polytropy index, chemical reaction

ABSTRACT: Experimental measurements were taken of the mass velocity u, pressure p, and time of chemical reaction τ during the detonation of solid explosives in the ideal detonation regime. The method used was based on the work of A. A. Brish, M. S. Tarasov, and Z. A. Tsukerman (Elektroprovodnost' produktov vzry*va kondensirovanny*kh VV. Zh. experim. i teor. fiz., 1959, t. 37. No. 6(12), 1543) and A. N. Dremin, K. K. Shvedov, and V. A. Veretennikov (Issledovaniye detonatsii ammonita PZhV-20 i nekotory*kh drugikh VV. Sb. Vzry*vnoye delo, 1963, No. 52/9). This method exploited the phenomenon of electromagnetic induction for these measurements. Aluminum foils were used for conductors with a thickness of 0.1 mm and a width of 12 to 15 mm, and were bent to form a horseshoe. The experiment

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ACCESSION NR: AP4034282

was conducted at a constant magnetic field of 400 oersteds (±1. 5%) created by stationary electromagnets. As the detonation wave passed by the charge, the crossbar of a data unit moved with the mass velocity perpendicular to the magnetic field. The emf from the ends of the data unit was recorded by an oscillograph. It was assumed that the presence of the data unit in the explosive did not distort the profile of the detonation wave. An abrupt rise followed by a smooth drop in the mass velocity was observed from the oscillogram taken in inert media. For checking this work, the velocity in front of the detonation wave was measured for trotyl at various densities for which data had been obtained earlier by different methods. The magnitudes of the velocity u, reaction time τ, speed of detonation D, the pressure in the Chapman-Jouguet region p, the index of polytropy n, and the thickness of the reaction zone a are related by the formula $p = \rho_0 u_1 D, \quad n = D/u_1 - 1, \quad a = (D - \langle u \rangle)\tau$, where $\langle u \rangle$ is the average velocity of motion of the substances in the chemical regime. The results obtained in this work were compared with those of V. M. Zaytsev, P. F. Pokhil and K. K. Shchvedov (Elektromagnitny*y metod izmereniya skorosti produktov vzry*va. Dokl. AN SSSR, 1960, v. 132, No. 6.). It was found that the values obtained for u and p in the present work were somewhat smaller than those obtained in the above reference. Orig. art. has: 1 formula, 3 figures, and 1 table.

Card 2/3

ACCESSION NR: AP4034282

ASSOCIATION: none

SUBMITTED: 28Dec63

SUB CODE: WA

NO REF SOV: 008

ENCL: 00

OTHER: 007

Card 3/3

L 14220-66 EWT(l)/EWT(m)/EWP(j)/FCS(k)/FSS-2 RM/WW/JW/JWD

ACC NR: AP6004424 SOURCE CODE: UR/0414/65/000/003/0003/0009

AUTHOR: Veretennikov, V. A. (Moscow); Dremin, A. N. (Moscow); Shvedov, K. K. (Moscow

ORG: none

44

TITLE: Determination of the detonation parameters of condensed explosives

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SOURCE: Fizika goreniya i vzryva, no. 3, 1965, 3-9

TOPIC TAGS: condensed explosive, detonation velocity, detonation pressure

ABSTRACT: To determine the effect of the explosive density ρ and charge diameter d on the detonation parameters of condensed explosives, the detonation velocity D, mass velocity u_1, pressure p_1, reaction time τ, and the width of the reaction zone a were measured in charges of trinitrotoluene (TNT) with $\rho = 0.8$—1.59 g/cm^3, d = 22.5—600 mm, and the charge length-diameter ratio h/d = 2.25—9.75. In TNT charges with ρ = 1.59 g/cm^3 and d = 60 mm, an h/d ratio above 2.25 has no effect on the detonation parameters. A comparison of pressure and reaction time data obtained for TNT charges by different methods showed that while for TNT charges with d = 100 mm and ρ = 0.8 g/cm^3, the reaction time measured by the electromagnetic method was 0.68 μsec at p_1 = 41,700 atm, for charges of the same density and d = 200 mm, τ was 0.23 μsec at p = 51,900 atm., when measured by the propelled plate method. This considerable decrease in the reaction time cannot be attributed to the pressure increase. Therefore, it is suggested that the decrease in the reaction time measured by the propelled metal

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ACC NR: AP6004424

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plate method is due to the effect of a reflected shock wave on the explosive-metal plate interface, and this must be taken into account. The reaction time decreased as the pressure in the reaction zone increased. The effect of the reflected wave decreased as the initial densities of the explosives increased. In this case, similar results are obtained by both methods. The use of thin metal plates also decreases the effect of the reflected shock wave on the pressure in the reaction zone, and, consequently, on the reaction time. The mass velocity profile for the detonation wave of condensed explosives has a clearly defined peak, which was predicted by the hydrodynamic theory (Ya. B. Zel'dovich, ZhETF, 1940, 10, 542). It can be identified with the chemical reaction zone. Analysis of the curves of the relationship $a = a(1/d)$ showed that even when $d = \infty$, a and τ are finite. Orig. art. has: 4 tables and 6 figures. [PS]

SUB CODE: 19/ SUBM DATE: 15Jan65/ ORIG REF: 009/ OTH REF: 002/ ATD PRESS: 4195

TS

Card 2/2

SOV/137-58-12-25123

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 154 (USSR)

AUTHORS: Gorev, K. V., Shvedov, L. I.

TITLE: Precipitation Hardening of Iron Under the Influence of Certain Intermetallic Compounds (Dispersionnoye tverdeniye zheleza pod vliyaniyem nekotorykh intermetallicheskikh soyedineniy)

PERIODICAL: Sb. nauchn. tr. Fiz.-tekhn. in-t AN BSSR, 1958, Nr 4, pp 162-169

ABSTRACT: The authors investigated the influence of Al, Ni, Ti, and other alloying elements forming intermetallic compounds with Fe or with each other on the precipitation hardening of Fe-base alloys. Specimens 25 mm in diam and 15-20 mm high were quenched in water or in oil from 1200°C and aged at 500 and 600°C up to 48 hours. H_B hardness was measured. Curves of the changes of hardness in relation to the alloying-element content and the heat-treatment schedule (temperature and duration of aging period) were constructed. It is established that the groups of alloys of Fe with Al and Ni, Al and Ti, and Ni and Ti studied display an appreciable aging effect at a certain ratio of components and, therefore, can be used as a known base for the development of new high-temperature alloys.

B. G.

Card 1/1

GOREV, K.V.; SHVEDOV, L.I.

Effect of aluminum on properties of iron-chromium-nickel-manganese alloys. Inzh.-fiz. zhur. no. 6:45-49 Je '58. (MIRA 11:7)

1. Fiziko-tekhnicheskiy institut AN BSSR, Minsk.
(Iron-aluminum alloys)

SHVEDOV, L.I.

Heat resistance of high-alloyed iron-aluminum alloys [with summary in English] Inzh.-fiz.zhur. no.12:69-71 '58.
(MIRA 11:12)

1.Fiziko-tekhnicheskiy institut AN BSSR, g. Minsk.
(Iron-aluminum alloys--Testing)

37976
S/137/62/000/005/096/150
A006/A101

18.1151

AUTHORS: Gorev, K. V., Shvedov, L. I.

TITLE: The effect of carbon and vanadium upon the properties of iron-base austenite alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 65 - 66, abstract 5I392 ("Dokl. AN BSSR", 1961, v. 5, no. 10, 455 - 457)

TEXT: The authors studied the effect of C and V, present separately or jointly in austenite Fe-Cr-Mn alloys, upon the effect of precipitation hardening and durable hardness. An alloy containing (in %) C 0.05, Cr 10, Ni 12, Mn 10, Al 4, the rest Fe, was used as initial material. Alloying with carbon of the alloys causes an increase in the effect of precipitation hardening. With a higher C content raised from 0.05 to 0.35%, the hardness of alloys increases from 116 to 163 kg/mm^2; in an alloy quenched from 1,200°C and aged at 750°C it increases from 202 to 286 kg/mm^2. A considerable effect of improving the properties of the alloys is obtained by the simultaneous addition of C and V to the alloys. The high degree of precipitation hardening in these alloys is achieved by the singling-

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GOREV, K.V.; SHVEDOV, L.I.

Effect of carbon and vanadium on the properties of iron-base austenite alloys. Dokl. AN BSSR 5 no.10:455-457 O '61. (MIRA 15:3)

1. Fiziko-tekhnicheskiy institut AN BSSR.
(Iron alloys) (Carbon) (Vanadium)

L 17158-65 EWT(m)/EWP(b) ASD(m)-3 JD/JG/MLK
ACCESSION NR: AT4046853 S/0000/64/000/000/0262/0266

AUTHOR: Shvedov, L. I. D+1

TITLE: Effect of aluminum and vanadium on the strengthening of Fe-Cr-Ni-Mn austenite at high temperatures

SOURCE: AN SSSR. Nauchny*y sovet po probleme zharoprochny*kh splavov. Issledovaniya staley i splavov (Studies on steels and alloys). Moscow, Izd-vo Nauka, 1964, 262-266 4

TOPIC TAGS: austenitic steel, alloy steel, aluminum admixture, vanadium admixture, steel strength, heat resistant steel 16 21 27

ABSTRACT: The author studied the effect of aluminum (0-4.5%) and vanadium (0-1.7%) on the strengthening of the Fe-Cr-Ni-Mn γ-solid solution in aged iron-based chromium-(11%), nickel-(12%), manganese-(8%), carbon-(0.11-0.44%) alloys. Aging curves for cast samples, quenched in water after treatment at 1150C for 3 hours and aging at 650-800C for time periods up to 150 hrs, were plotted from hardness figures obtained with a Brinel press. Long-term hardness (a) and stress-rupture strength (b), as criteria of heat-resistance, were measured (a) in 10-mm spherical samples subjected for one hour to a load of 1000 kg at 750C on a special press, and (b) in deformed, thermally treated, spherical samples, 5 mm in diameter, with the use of VP-8 machines at 700C and 25 or 28 kg/mm^2. From

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L 17158-65
ACCESSION NR: AT4046853

the results, which are rather complex and show little uniformity (see Figures 1 & 2 of the Enclosure), a general conclusion is drawn that: a) a result of dispersion hardening, the strength of aging alloys can be markedly increased by introducing aluminum in excess of 2.5% into austenite containing 0.3-0.4% C, 11% Cr, 12% Ni, and 8% Mn; and b) by combined alloying of this austenite with specified amounts of aluminum and vanadium, a high-quality heat-resistant steel can be produced. Orig. art. has: 1 table and 3 figures.

ASSOCIATION: None

SUBMITTED: 16Jun64 ENCL: 03 SUB CODE: MM

NO REF SOV: 005 OTHER: 000

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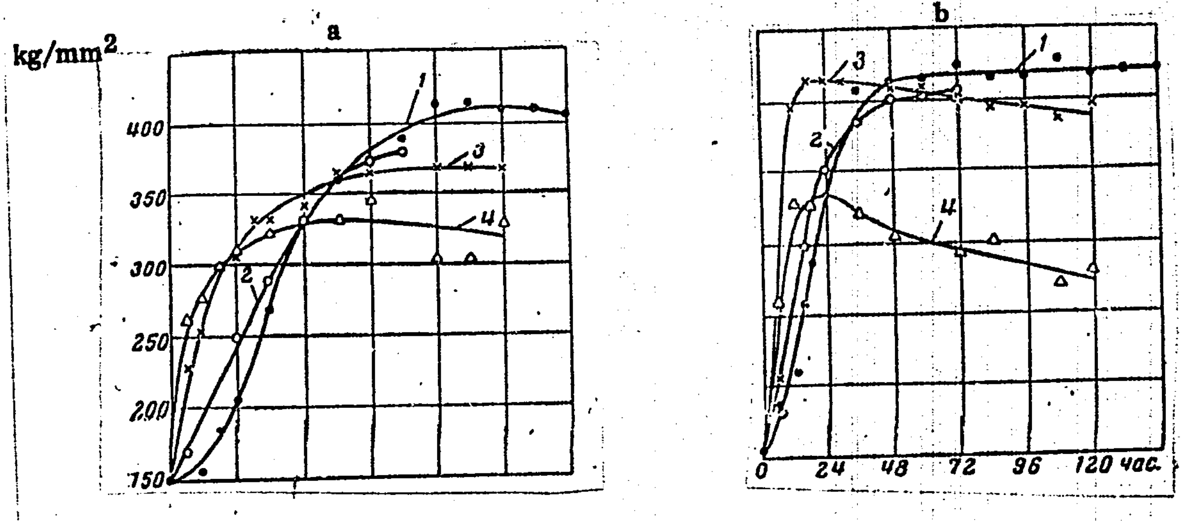
L 17158-65
ACCESSION NR: AT4046853

ENCLOSURE: 01



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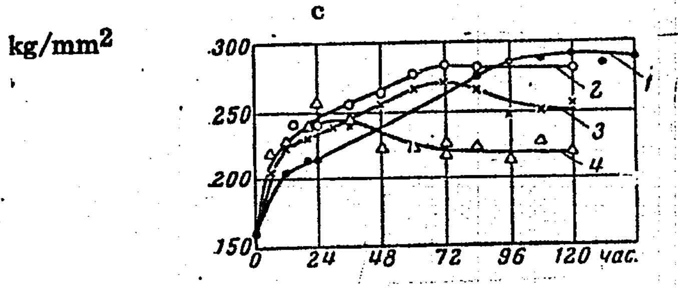
ENCLOSURE: 02

O



120 hrs.

Fig. 1. Dependence of hardness of Fe-Cr-Ni-Mn alloys on aging time at 650C (1), 700C (2), 750C (3), and 800C (4); a- 4.2% Al alloy, b - 1.7% V alloy, C - 4.1% Al and 1.7% V alloy.

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ACCESSION NR: AT4046853

ENCLOSURE: 03

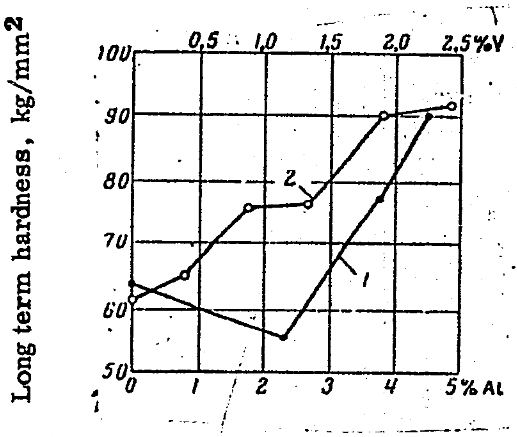

Fig. 2. Long-term hardness of alloys with 0.3-0.4% C, 11% Cr, 12% Ni, 8% Mn and different aluminum (curve 1) and vanadium (curve 2) contents.

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L 02512-67 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JH

ACC NR: AR6023323 SOURCE CODE: UR/0276/66/000/003/B022/B022

58
56
B

AUTHOR: Shvedov, L. I.; Pavlenko, Z. D.

TITLE: Testing high-temperature steel 16 for thermal stability

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 3B164

REF SOURCE: Sb. Metallovedeniye i term. obrabotka met. Minsk, Nauka i tekhnika, 1965, 172-179

TOPIC TAGS: thermal stability, cyclic annealing, ~~heat treatment~~, high temperature steel

ABSTRACT: A method is developed for studying the thermal stability of 16 high-temperature steel and the effect which thermal cycling during heat treatment has on the dimensions of steel specimens. The cyclic heat treatment consisted of heating to 900°C with holding to temperature equalization and cooling in water, which corresponds to the operating conditions for the hearths in tempering furnaces. Kinematic and electrical diagrams are given for the special installation used for cyclic heat treatment. An installation is designed for testing the thermal stability of materials without the application of external loads. The proposed device heats the specimen longitudinally and may be used for determining the variation in its length after cyclic heat treatment according to a given set of conditions. Diagrams of the

UDC: 621.785.001.5:669.15.001.5

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ACC NR: AR6023328

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unit and the system used for fastening specimens are given. The effect of aluminum on changes in the dimensions of specimens during cyclic heat treatment and on changes in the thermal stability of Cr-Ni steels is discussed. 7 illustrations, bibliography of 10 titles. [Translation of abstract]

SUB CODE: 11, 13

Card 2/2 egk

SHVEDOV, L.M.

Neutralization by antiserum introduced by the enteral route of toxin formed in the gastrointestinal tract during experimental intoxication with Clostridium botulinum A toxin. Zhur.mikrobiol.epid. i imun. 30 no.1:72-77 Ja '58. (MIRA 12:3)

1. Iz Odesskogo gosudarstvennogo meditsinskogo instituta imeni N.I. Pirogova.
(CLOSTRIDIUM BOTULINUM,
toxin A, neutralization (Rus))

SHVEDOV, L. M. Cand Med Sci -- (diss) "Observations of the production of botulism toxin in the digestive tract of animals infected through the mouth with the culture of type 'A' botulism germ ~~of the [illegible] type~~ and ~~of~~ its neutralization by enterically [illegible] ~~introduced~~ antiserum." Odessa, 1959. 15 pp (Odessa State Med Inst im N. I. Pirogov), 200 copies (KL, 52-59, 127)

SHVEDOV, L.M.

Observations on the production of toxins in the gastrointestinal tract of animals infected orally with a culture of the pathogen botulism type A. Zhur.mikrobiol.epid.i immun. 31 no.1 Ja '60. (MIRA 13:5)

(BOTULISM experimental)

EDNERAL, Fedor Prokop'yevich; FILIPPOV, Anatoliy Fedorovich;
KRAMAROV, A.D., prof., doktor tekhn. nauk, retsenzent;
TOLSTOGUZOV, N.V., dots., kand. tekhn. nauk, retsenzent;
LEVIN, A.M., retsenzent; VISHNYAKOV, A.V., retsenzent;
KATS, L.N., retsenzent; SHVEDOV, L.V., red.; ROZENTSVEYG,
Ya.D., red. izd-va; MIKHAYLOVA, V.V., tekhn. red.

[Calculations on the electrometallurgy of steel and ferroalloys]Raschety po elektrometallurgii stali i ferrosplavov. Izd.2., ispr. i dop. Moskva, Metallurgizdat, 1962. 230 p. (MIRA 15:12)

(Steel--Electrometallurgy)
(Iron alloys--Electrometallurgy)

ROZENTSVEYG, Yan Davydovich; SHVEDOV, Lev Vladimirovich; VENETSKIY, Sergey Iosifovich; PLINER, Yu.L., kand. tekhn. nauk, retsenzent; RYSS, M.A., inzh., red.

[Brief handbook on the manufacture of ferroalloys (for workers)] Kratkii spravochnik ferrosplavshchika (dlia rabochikh). Moskva, Izd-vo "Metallurgiia," 1964. 343 p.
(MIRA 17:5)

SHVEDOV N.A.

LISOVENKO, S.I.; ZOLOTUKHIN, I.M.; KOSTYUK, A.P.; LISOVENKO, E.V.; FEL'DMAN, M.F.; KUZNETSOV, T.F.; PIVOVAROV, L.A., inzhener, retsenzent; SHAROYKO, P.M., inzhener, retsenzent; TURIK, N.A., inzhener, retsenzent; KIRILLOV, Yu.G., inzhener, retsenzent; SHVEDOV, N.A., inzhener, retsenzent; RUDENSKIY, Ya., tekhredaktor.

[Locomotives]Parovozy. Pt. 2. [Theory, design, and calculations for machinery, underframe, and auxiliary parts. Dynamics, traction calculations, and brief information on operation] Teoriia, konstruktsiia i raschet mashiny, ekipazha i vspomogatel'nykh ustroist, dinamika, tiagovye razchety i kratkie svedeniia po ekspluatatsii. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry. 1954. 475 p. [Microfilm] (MLRA 7:11)

(Locomotives)

KARA-MURZA, Evelina Nikitichna; SHVEDOV, N.A., kand.geol.-mineral. nauk, red.; SHVEDOV, N.A., nauchn.red.; DAYEV, G.A., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Palynological basis for stratigraphic correlation of Mesozoic sediments in the Khatango Depression] Palinologicheskoe obosnovanie stratigraficheskogo raschleneniia mezoziskikh otlozhemii Katangskoi vpadiny. Leningrad, Gos.nauchn-tekhn.izd-vo nefti i gorno-toplivnvi lit - ry. Leningr. otd-nie, 1960. 134 p. (Leningrad. Nauchno-issledovatel'skii institut geologii arktiki. Trudy, vol. 109) (MIRA 13:12)

(Khatanga Depression--Geology, Stratigraphic)
(Palynology)

SHVEDOV, N.A.; USTRITSKIY, V.I.; [illegible]HERNYAK, G.Ye.; GERKE, A.A.; SOSIPATROVA,G.P.

New stratigraphic scheme of upper Paleozoic sediments in the Taymyr Peninsula. Sbor.st.po paleont. i biostrat. no.24:12-15 '61. (MIRA 15:2)

(Taymyr Peninsula--Geology,Stratigraphic)

SHVEDOV, N.A.

Find of Paraschizoneura sibirica (Neub.) Radcz. in Permian sediments of the Taymyr Peninsula. Sbor.st. po paleont. i biostrat. no.26: 72-75 '61. (MIRA 15:8)

(Taymyr Lake region--Horsetail, Fossil)

SHVEDOV, N.A.

New effective ultrasonic method for a large-scale treatment of rock samples for the spore-pollen analysis. Sbor.st.po paleont. i biostrat. no.28:93-94 '62. (MIRA 16:9)
(Palynology) (Ultrasonic waves--Industrial applications)

ORLOV, Yu.A., glav. red.; TAKHTADZHYAN, A.L., otv. red.; VAKHRAMEYEV, V.A., red.; RADCHENKO, G.P., red.; SHVEDOV, N.A., red.; VASILEVSKAYA, N.D., red.; TURUTANOVA-KETOVA, A.I., red.; MURAV'YEVA, O.A., red.; POKROVSKAYA, I.M., red.; YATSENKO-KHMELEVSKIY, A.A., red.; GOROKHOVA, T.A., red. izd-va; GUROVA, O.A., tekhn. red.

[Fundamentals of paleontology; manual for paleontologists and geologists of the U.S.S.R. in 15 volumes] Osnovy paleontologii; spravochnik dlia paleontologov i geologov SSSR v piatnadtsati tomakh. Glav. red. IU.A.Orlov. Moskva, Izd-vo AN SSSR. Vol.15.[Gymnosperms and angiospersm] Golosemennye , pokrytosemennye. 1963. 742 p. (MIRA 16:11)
(Gymnosperms, Fossil) (Angiosperms, Fossil)

SHVEDOV, N.A.

New Early Triassic plants from the Noril'sk region. Sbor. st. po paleont. i biostrat. no.32:59-67 '63. (MIRA 16:11)

VAKHRAMEYEV, V.A., otv. red.; SHVEDOV, N.A., otv. red.; VANYUKOVA, O.M., red.

[Gondwana] Gondvana. Moskva, Izd-vo "Nauka," 1964. 139 p. (Its: Doklady sovetskikh geologov, Problema 9) (MIRA 17:9)

1. International Geological Congress. 22d, 1964.

MOSKALEV, A.I.; SHVEDOV, N.I. (g.Nikolayev)

Use of diluted iodolipol for the X-ray study of the accessory sinuses of the nose. Zhur.ush., nos.i gorl.bol. 21 no.6:72 N-D '61. (MIRA 15:11)

(CONTRAST MEDIA) (NOSE, ACCESSORY SINUSES OF)

BAYGMAN, L. L.; SHVEDOV, N. M., elektromekhanik radiosvyazi;
KOMISSAROV, P. N., elektromekhanik radiosvyazi; BOGOYAVLENSKIY,
V. I., elektromekhanik radiosvyazi

Pressing problems in radio communications. Avtom., telem. i
sviaz' 7 no.4:37-38 Ap '63. (MIRA 16:4)

1. Starshiy elektromekhanik radiosvyazi Rtishchevskoy distantsii
signalizatsii i svyazi Privolzhskoy dorogi (for Baygman)

(Railroads—Communication systems)

SHVEDOV, N.N.

Wheatstone bridge installed for demonstration purposes. Fiz.v shkole 7 no. 4:70-72 '53. (MLRA 6:11)

1. Odessa, 1-ya zheleznodorozhnaya shkola. (Electric resistance)

L 27867-66 EWT(m)/EWA(h) GS

ACC NR: AT5023946 UR/0000/65/000/000/0338/0341

AUTHOR: Yakovleva, G.V.; Garbolyauskas, Ch.A.; Styro, B.I.; Shvedov, N.P.

TITLE: Radioactive fallouts in Vil'nyus in 1962

10
B+1
19

Source: Nauchnaya konferentsiya po yadernoy meteorologii. Obninsk, 1964. Radioaktivnyye izotopy v atmosfere i ikh ispol'zovaniye v meteorologii (Radioactive isotopes in the atmosphere and their utilization in meteorology); doklady konferentsii. Moskow, Atomizdat, 1965, 338-341

TOPIC TAGS: radioactive fallout, radioisotope, radioactive contamination

ABSTRACT: Radioactive fallout products of the atmosphere were collected monthly, evaporated and incinerated. The ashes were analyzed by a scintillation gamma spectrometer. The distribution of monthly average individual and total activity was plotted by months. It revealed a shift of the usual spring maximum toward the summer of 1962, probably due to the unusually generous precipitation during the summer. The increase of fallout activity toward December of 1962, exceeding 200 microcuries/square kilometer.month can be explained by the arrival of fresh fission products. This was confirmed by plots of the activity ratios:

$$^{141}\mathrm{Ce}/(\mathrm{Ce}+\mathrm{Pr})^{144} \quad \text{and} \quad (\mathrm{Zr}+\mathrm{Nb})^{95}/(\mathrm{Ce}+\mathrm{Pr})^{144}$$

The second ratio showed a sudden rise in August - November. The cumulative fallouts

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were calculated with the consideration of the intrinsic decay. For $(Ce - Pr)^{144}$, they reached the level of 80 microcuries/ square kilometer. The dose from the gamma radiation of the deposited fission products, at a height of 1 meter from the ground was slightly over 10 mr/year. The orig. art. has 3 figures.

ASSOCIATION: 00

SUBMITTED: 00

ENCL: 00

SUB CODE: 18, 08

NO REF SOV: 000

OTHER: 000

(18)

Card 2/2 20

EXCERPTA MEDICA Sec 18 Vol 3/3 Cardio. Dis. Mar 59

839. **ECG changes in acute occlusion of the pulmonary artery and its branches (Russian text)** SHVEDOV N.Ya. *Terap. Arkh.* 1958, 30 1 (29–39) Graphs 7

ECGs of 35 patients with pulmonary embolizations were analysed. Twenty-four patients had normal ECGs prior to the episode of embolization, while the remaining 11 had various heart diseases and their ECGs were abnormal before embolization. In the first group, only 4 patients failed to develop ECG changes after embolization, and 3 of them had a very mild clinical course. The remaining 21 showed the following changes: development of Q-wave in lead III in 16, decrease in the amplitude of R-wave in lead III in 10, inversion of the T-wave in lead III in 17, inversion of T-wave in right precordial leads in 12, lowering of the T-wave in leads I, II in 8, development of a deeper S-wave in the left precordial leads in 11, S-T elevation in lead III in 5, incomplete right bundle-branch block in 2 patients. The patients with abnormal ECGs prior to the embolizations showed much less remarkable changes after the episode of embolization. The transient nature of the ECG changes after pulmonary embolizations is emphasized. Surawicz – Burlington, Vt. (XVIII, 6*)

SHVEDOV, N.Ya.

Clinical picture of chronic leukemia. Sov.med. 23 no.7: 46-53 Jl '59. (MIRA 12:11)

1. Po materialam Glavnogo voyennogo gospitalya imeni N.N. Burdenko (nachal'nik - general-mayor meditsinskoy sluzhby L.M.Lyalin).

(LEUKEMIA)

SHVEDOV, N.Ya.

Embolisms and thromboses of the pulmonary artery. Sov. med. 27 no.3:20-28 Mr '64. (MIRA 17:11)

1. Glavnyy voyennyy gospital' imeni N.N. Burdenko (nachal'nik - general-mayor meditsinskoy sluzhby L.I. Lyalin).